

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P588683

Luminaire Tested: **22CGTS-NUV-MID-5000K**

Issue Date: 12/3/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P588683  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( LCS210329025BSA)  
Test Lab:  
Issue Date: 12/3/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CGTS-NUV-MID-5000K  
Description: 2X2 CGT SELECT TROFFER AT MID LUMEN OUTPUT AND 5000K COLOR SETTING

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

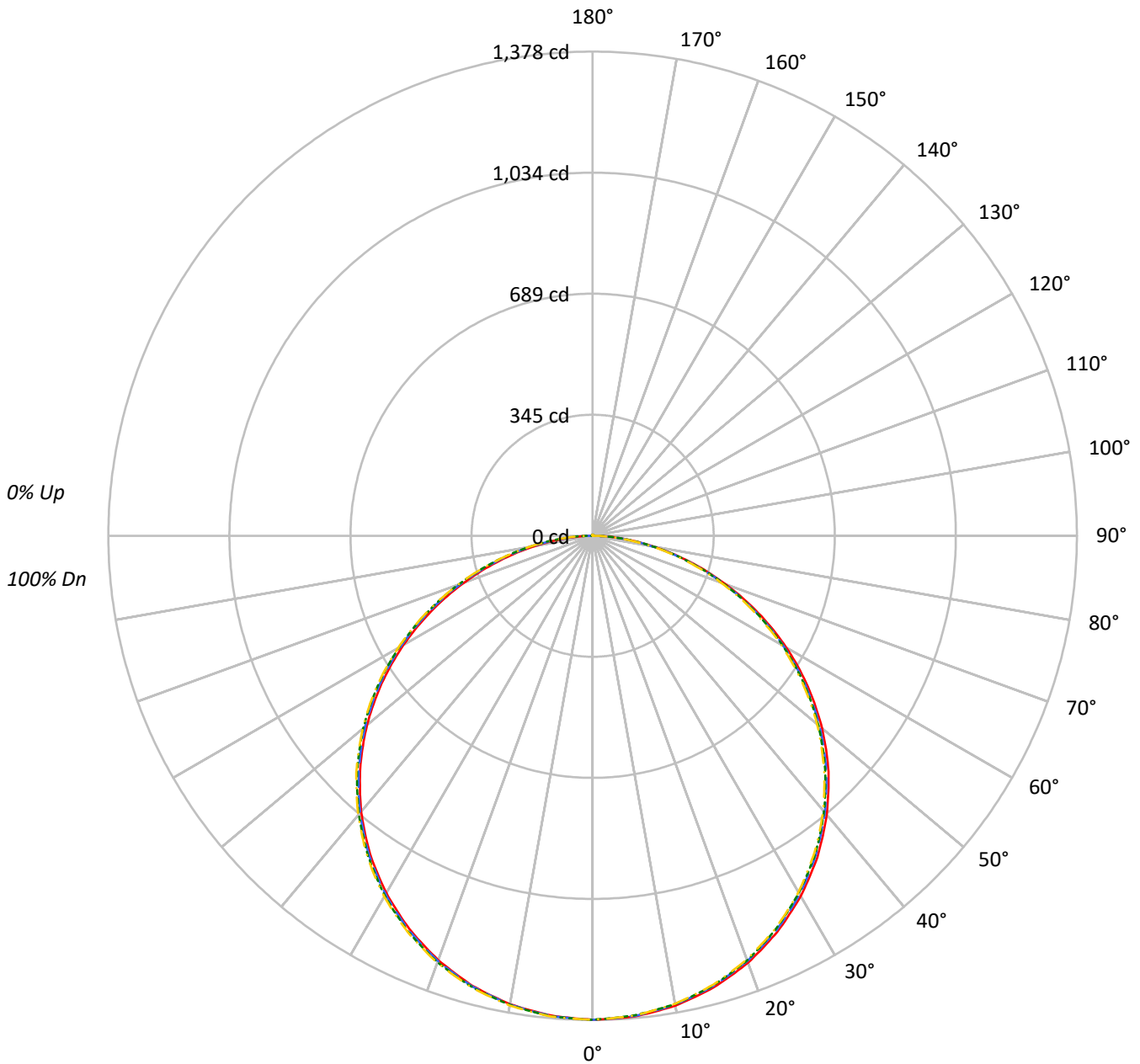
Lumens per Lamp: 3510.7 (1 lamp)  
Luminaire Lumens: 4059.9 lumens  
Efficiency: 115.6%  
Efficacy: 115.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

TEST NUMBER: P588683

CATALOG NUMBER: 22CGTS-NUV-MID-5000K

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	138	138	138	138	134	134	134	134	128	128	128	123	123	123	118	118	118	115								
1	125	120	115	110	122	117	112	108	112	108	105	108	104	102	103	101	98	96								
2	114	104	96	89	111	102	94	88	98	91	86	94	89	84	90	86	82	80								
3	104	91	82	74	101	89	80	73	86	78	72	83	76	71	80	74	69	67								
4	95	81	70	62	92	79	69	62	76	68	61	73	66	60	71	65	59	57								
5	87	72	61	54	85	71	61	53	68	59	53	66	58	52	64	57	51	49								
6	80	65	54	47	78	64	54	46	61	53	46	59	52	46	58	51	45	43								
7	74	59	48	41	72	58	48	41	56	47	41	54	46	40	53	45	40	38								
8	69	53	43	37	67	53	43	36	51	42	36	50	42	36	48	41	36	34								
9	65	49	39	33	63	48	39	33	47	39	33	46	38	32	44	37	32	30								
10	61	45	36	30	59	45	36	30	43	35	30	42	35	29	41	34	29	27								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	3707	3707	3707	3707
5°	3710	3700	3702	3707
10°	3710	3697	3699	3705
15°	3707	3692	3692	3703
20°	3703	3683	3680	3699
25°	3693	3666	3666	3690
30°	3679	3646	3649	3675
35°	3665	3629	3629	3658
40°	3640	3599	3600	3634
45°	3611	3559	3559	3606
50°	3569	3509	3508	3566
55°	3507	3445	3438	3506
60°	3426	3360	3345	3428
65°	3313	3244	3218	3324
70°	3162	3100	3053	3194
75°	2968	2912	2838	3030
80°	2696	2676	2534	2834
85°	2322	2306	2078	2587



TEST NUMBER: P588683

CATALOG NUMBER: 22CGTS-NUV-MID-5000K

**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp	0°	90°	180°	270°	360°	Flux
0°-10°	130.4	3.2	3.7	0°	1378	1378	1378	1378	
10°-20°	374.7	9.2	10.7	5°	1373	1370	1370	1372	1373
20°-30°	571.0	14.1	16.3	15°	1331	1325	1325	1329	1331
30°-40°	693.6	17.1	19.8	25°	1244	1235	1235	1243	1244
40°-50°	725.6	17.9	20.7	35°	1116	1105	1105	1114	1116
50°-60°	660.9	16.3	18.8	45°	949	935	935	948	949
60°-70°	508.6	12.5	14.5	55°	748	734	733	747	748
70°-80°	299.7	7.4	8.5	65°	520	510	505	522	520
80°-90°	88.7	2.2	2.5	75°	286	280	273	291	286
90°-100°	0.9	0.0	0.0	85°	75	75	67	84	75
100°-110°	0.6	0.0	0.0	90°	2	0	1	3	2
110°-120°	0.8	0.0	0.0	95°	1	0	0	1	1
120°-130°	0.8	0.0	0.0	105°	0	1	1	0	0
130°-140°	0.9	0.0	0.0	115°	0	1	1	0	0
140°-150°	1.0	0.0	0.0	125°	0	1	1	0	0
150°-160°	0.9	0.0	0.0	135°	1	2	2	0	1
160°-170°	0.6	0.0	0.0	145°	2	2	2	1	2
170°-180°	0.2	0.0	0.0	155°	2	2	2	2	2
0°-30°	1076.1	26.5	30.7	165°	2	3	3	2	2
0°-40°	1769.7	43.6	50.4	175°	3	3	3	3	3
0°-60°	3156.2	77.7	89.9	180°	3	3	3	3	3
0°-90°	4053.1	99.8	115.5						
90°-120°	2.3	0.1	0.1						
90°-150°	5.0	0.1	0.1						
90°-180°	7.0	0.2	0.2						
0°-180°	4059.9	100.0	115.6						



TEST NUMBER: P588683

CATALOG NUMBER: 22CGTS-NUV-MID-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5
5°	1373.4	1372.5	1371.8	1371.6	1369.9	1370.9	1370.4	1370.4	1370.4	1371.1	1371.5
10°	1357.8	1356.0	1354.4	1353.7	1353.1	1353.1	1352.3	1352.7	1353.8	1353.8	1354.6
15°	1330.7	1328.6	1326.6	1325.2	1325.2	1323.9	1323.1	1324.1	1325.4	1326.3	1327.2
20°	1293.1	1290.4	1287.3	1285.5	1286.0	1283.7	1283.0	1284.1	1284.9	1286.7	1288.0
25°	1243.7	1241.1	1238.3	1235.4	1234.6	1233.5	1232.4	1233.0	1234.6	1236.7	1238.5
30°	1184.1	1181.1	1178.1	1175.0	1173.5	1172.1	1171.4	1171.9	1174.2	1176.1	1178.8
35°	1115.5	1111.5	1107.8	1103.2	1104.6	1102.0	1100.4	1101.6	1104.8	1106.8	1109.3
40°	1036.1	1032.3	1027.7	1023.5	1024.4	1021.9	1020.8	1021.6	1024.8	1026.4	1029.9
45°	948.9	944.2	940.1	935.2	935.3	932.7	930.9	932.5	935.3	937.8	940.8
50°	852.4	847.1	842.6	837.6	838.1	835.2	833.3	834.6	837.9	840.2	845.0
55°	747.5	742.8	738.2	733.5	734.3	731.4	728.6	729.6	732.9	735.6	740.7
60°	636.5	631.5	626.5	622.0	624.4	621.0	618.4	618.3	621.6	624.8	631.1
65°	520.3	515.9	511.3	507.3	509.5	506.6	503.2	502.2	505.4	509.4	515.9
70°	401.9	397.5	394.3	390.8	394.0	390.5	387.2	385.6	388.0	392.4	399.5
75°	285.5	282.1	279.6	277.1	280.1	277.4	273.8	271.5	273.0	277.7	284.9
80°	174.0	171.3	171.3	169.9	172.7	170.0	165.9	162.5	163.5	167.9	176.2
85°	75.2	73.1	72.7	72.4	74.7	72.2	67.9	66.2	67.3	70.5	76.7
90°	1.8	1.5	1.4	1.4	0.5	0.5	0.6	0.6	0.6	0.5	1.2
95°	0.7	0.7	0.7	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
100°	0.5	0.5	0.5	0.5	0.5	0.7	0.6	0.5	0.5	0.5	0.5
105°	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.6	0.7	0.7	0.8
110°	0.4	0.4	0.5	0.4	0.9	1.0	1.1	0.9	0.8	0.9	1.1
115°	0.4	0.4	0.5	0.4	1.1	1.2	1.2	1.0	1.1	1.2	1.2
120°	0.4	0.4	0.5	0.4	1.2	1.3	1.3	1.0	1.2	1.2	1.4
125°	0.4	0.4	0.5	0.4	1.2	1.4	1.3	1.0	1.2	1.2	1.4
130°	0.4	0.4	0.5	0.4	1.3	1.7	1.5	1.2	1.3	1.5	1.6
135°	0.7	0.4	0.5	0.4	1.6	1.7	1.6	1.6	1.7	1.9	1.8
140°	1.2	0.9	0.5	0.7	1.7	1.9	1.8	1.8	1.8	2.0	2.0
145°	1.5	1.5	0.8	1.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0
150°	1.5	1.5	1.5	1.5	2.1	2.2	2.3	2.3	2.0	2.3	2.3
155°	1.5	1.5	1.4	1.5	2.4	2.5	2.6	2.5	2.3	2.7	2.6
160°	1.5	1.5	1.4	1.5	2.7	2.8	2.9	2.5	2.7	2.7	2.9
165°	2.0	1.9	1.7	1.6	2.8	2.8	2.9	2.5	2.7	2.7	2.9
170°	2.1	2.2	2.0	2.1	2.9	2.8	3.1	2.5	2.7	2.7	2.9
175°	2.6	2.8	2.4	2.8	3.2	2.8	3.1	2.5	2.7	2.7	2.9
180°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6



TEST NUMBER: P588683

CATALOG NUMBER: 22CGTS-NUV-MID-5000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1377.5	1377.5	1377.5	1377.5	1377.5	1377.5
5°	1372.0	1372.2	1373.7	1373.4	1373.6	1373.4
10°	1355.6	1355.9	1357.7	1357.6	1357.8	1357.8
15°	1328.6	1329.1	1331.0	1330.8	1331.1	1330.7
20°	1291.1	1291.6	1293.4	1293.2	1293.4	1293.1
25°	1241.6	1242.8	1245.1	1244.8	1245.1	1243.7
30°	1181.9	1182.8	1185.5	1186.3	1186.1	1184.1
35°	1112.7	1113.6	1116.4	1116.7	1116.4	1115.5
40°	1034.1	1034.6	1037.4	1037.9	1037.4	1036.1
45°	945.6	947.6	949.8	950.8	949.7	948.9
50°	849.0	851.7	853.4	854.2	853.4	852.4
55°	745.9	747.3	749.9	750.5	749.1	747.5
60°	636.2	637.0	639.8	639.9	637.9	636.5
65°	521.7	522.0	525.3	524.6	522.2	520.3
70°	405.3	405.9	408.6	407.6	404.3	401.9
75°	291.8	291.4	293.9	292.3	288.8	285.5
80°	183.6	182.9	184.8	183.2	178.1	174.0
85°	84.5	83.8	85.4	82.8	78.7	75.2
90°	3.2	2.6	3.6	3.7	2.8	1.8
95°	0.5	0.8	0.7	0.7	0.8	0.7
100°	0.5	0.5	0.6	0.6	0.5	0.5
105°	0.6	0.5	0.5	0.5	0.5	0.4
110°	0.9	0.5	0.5	0.5	0.5	0.4
115°	1.0	0.5	0.5	0.5	0.5	0.4
120°	1.2	0.5	0.5	0.5	0.5	0.4
125°	1.2	0.5	0.5	0.5	0.5	0.4
130°	1.5	0.5	0.5	0.5	0.5	0.4
135°	1.6	0.5	0.5	0.5	0.5	0.7
140°	1.7	1.1	1.2	0.5	1.1	1.2
145°	2.0	1.4	1.5	0.9	1.4	1.5
150°	2.2	1.5	1.5	1.4	1.5	1.5
155°	2.5	1.5	1.5	1.4	1.5	1.5
160°	2.6	1.5	1.5	1.4	1.5	1.5
165°	2.6	1.7	1.7	1.6	1.8	2.0
170°	2.6	2.0	2.1	2.0	2.0	2.1
175°	2.6	2.7	2.9	2.3	2.7	2.6
180°	2.6	2.6	2.6	2.6	2.6	2.6



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°









(END OF REPORT)